# AVIATION JULY 24, 1950 A MCCRAW-HILL PUBLICATION WEEK



# It's GOOD YEAR Tires, Tubes, Wheels and Brakes for the F-90, too!

Now it's the new Lockheed F-90. For this speedy penetration fighter depends 100% on Goodyear extra-high-pressure Rib All-Weather tires, super-safe tubes, light-weight magnesium allow wheels and time-tested Single Disc Brakes for safe, sure landings and takeoffs. Fact is: More aircraft land on Goodyear tires, tubes, wheels and brakes than on any other kind—and the number's increasing steadily, because manufacturers, owners and operators have proved them best. For complete information about Goodyear aviation products, write:

Goodyear, Aviation Products Division, Akron 16, Ohio or Los Angeles 54, California





BOEING \* COL FAIRCHILD\*



DOUGLAS \*
REPUBLIC \*

GRUMMAN

Honeywell Electronic
Fuel gage on 27 Models!



ALREADY, many major electric maniformers have charged so a fiel gage operang on no entirely different prompile, proved by handsold of shousands of flying hours. A tend of 27 different models are couplinged with the Blessywell or protective properties field gages fred to indicated by moghe issued of volume. The shedged For growing recovery urder all conditions.

But just an important as the product, as an application as individual mode. Here the unusual depth of Homeywell's engineering resources often well infrance; Each type of intendition is theococycly analyses, Vermilde forces that path, and reall are not before based. A prescripe installation is used to grow the operation for two engineering is provided to our technical todools, coldringial continuous

It is such far reaching operations that have firmly simblished Honopwell as a producer of highly engineered accommission equipment. Minasspella-Honopwell, Minasspolla II, Manneson, In Carnda: Lexible, Toronto 17, Onaria.

Honeywell



Not the feast important feature of a well designed self-sealed ball bearing reconting in the years of service that may be expected Bot add to this the fact that bearing munitenance over this period in hought down to the varieties point and you have some of the reasons for the increasing trend to The Nov Departure half Earings shown above here delibered the egizedimi of 14 years had well and are fill serviceshie Add to the the fact that they have never been relaborated, how required to religinate on, a marrhenarca of any land and you have notice of the property of the produce why Nove Departure has to date punduced cross 120 railron addressed cross 120 railron and sometiments.

Remember — ball bearings take radial loads and thrust from any direction with greatest efficiency.

Nothing Belle Like a Ball

### NEW DEPARTURE BALL BEARINGS

NEW COTATION - Design of CONTRAC MICROSIA COSTORATION - MICEOL. COMMICTORIES

CC, COMMICTICAL MANCINES IN ALL PRINC



Neet Mr. Plies and his large facility of magh, topquality FEOTO- pions.
Industria gai all common 
types, accord specials and

types, accord specials and
the NSE place shutrant.
You'll rear wit delpts of
their many factories-free
sale are
all of steel, standy one
Needs

correct lecturage, rate of operation, properly shaped lects and surregity health. And now, over PEOTOplens have lectures

the 25 has plan you need from the quelty Tion"—of your PEOTO- dealers.

Wate for cooling to FLOMS TIOL COMPANY



Les Anneles 54, Cold

5

### Aviation Week

Volume 33 July 24, 1950 Number 4

HeadTim News Anisation Soles & Service Toler State State

As Piece General Information 50 Service Company (S. Ammonistical Engineering Money F. A. Wyller Performance Company (S. Ammonistical Engineering Company) (S. Ammonistical Engineering C

Norther Models (Models) (Norther Berrie)

Villam Korger — Assert Konge (Model) (Norther Berrie)

Almander Models) Anton Norther Models (Models) (Mo

Zeronine and Educated Offices: 130 Nat Gald Rt. New York St. N. N. Pentagoria Additi Chicated Prices High, Vandagoria A. Se. C. Pianto Nicolard St. Delimento Name Barretta Addition 3, Harden-Steamy Educate Delimento, Name Barretta Addition 3, Harden-Steamy Educate Delimento, 130 N. Nicolard St. Martin, Name Andrews, Andrews St. Martin, 130 Name A. Servicio St. Martin, 130 Name A. Servicio St. Martin, 131 Name A. Servicio St.

J. G. Jahmon, Emilson Messaye, R. V. Merts, Jr., Sales Ressaye, June Scoff, Erroserk and Machining, Solas Representatives J., G. Anberg, New York, N. I. Seng, Fish-Saleston V. V. Brossen, Cheveland, L. J. End. George, V. V. Bossen, On, Lone, J. E. Libe, Belley S. C. Sheshey, Irland J. T. Generos, Son Francisco C. Lone, J. S. Libe, Salesty S. C. Sheshey, Irland J. P. Generos, Son Francisco C. F. Milleyschik, Lon Aughton, Colles axis, editor in Fankoptic, Devens, Stem-

And the second s

# LOCKHEED AIRCRAFT CORPORATION

EASTERN AIR LINES
specify entire AiResearch
pressurizing and air-conditioning

equipment for the new



How comes the news that AlBestensh equipment will be used to prevention and air condition the first of 10 new super Canadalations undeed by Extens Air Lane. This follows closely on the healt of the area more ment that the Research resultment will be used on the

and approximately 2x instrintial components, in 14th pc
for products and control a cities are flow of 14th pc
Are
of our per messue, 40 pounds more than in the it
are and #140 Constitutions Mages components, to
include two cultus superchargess, two include two
cultus superchargess, two includes cells
some units and los orders personar regulation, with
sentiles and logophy interchanguable with those to

r Leien, 1931, "With new Leien the design, engineer the equipment personal time." New Type Controllation Only Arberteeth has this him to the Controllation of the Controllation o

this lacking of "know how" an skilled manyoner which already has created person using and air conditional equipment for a enjark of all post war softlary as

UNIVERSE MATERICIPANTE COMMON, LOS ANCHES SE, EAGIFOR



Among the case, emparate the first a product of the product of the

Bullishen Street Co.-Leatherd Lodering

Q.F Bettering Inc.-Common Medical

minkly ... have been so unrevoted in absorbing the Source Zero Render" for \*Developed by Severy with the goograpors and encouragement of AT-Worther Brigge Manufacturing Co. - Common McCard \* Earliest Container Corp. - Hourte Senation . If Smiling wide acceptance with Benders an industry who find a prestitable to have a find and Senation . There even account. And the mises of these places are setting new assurance of

des front Co.—Brancas Medica.

Second Mills, ha. «Brangles BC 3 in releved of all complex mutal calculations. The delicals test of making a ever landing information. The pilot searly "nitio" two instrument position and Physical Ol Co. - Burgles #6.3

DESCRIPTION OF THE PROPERTY ASSESSMENT AND THE PARK OF THE PARK OF

### News Picture Highlights . . .



any Orb Feld, Fun, to show specialism to sevel large type dive sector a new in quantity production for the EAF.



proper be then McDounell Advent common, shows off an investment to be too, and wanger castlesy where.



COPTERS NEST ON CARRIER USS Tales sports pight Tworks HSP I tradem sets; region local

NEW USAF TRAINERS

AVIATION WEEK, July 24, 1980



RADAR SHELTER

Problem:

Solution:

makely dailer half and the a meetily

### AVIATION CALENDAR

Mr 2005-Av Ary Septate Section sees. Job 26-27th Assertment Coldention,

Sept. \$20-bloomb from deploy and co-

of these light wright, water that children and is married light except, in married in communities that the communities that the communities that the communities are not to be communities to be communities. Sebed by approper of a Franci drops and providing processor strictly studies. Australia de line fally except of except as only

Det 1628-1550 arend gerent seeing

sub-contractor EXPERT EABRICATORS O METAL MIDORIST PARTS

PICTURE CREDITS AIRCRAFT CORPORATION





Those flow and drawn values and



### NEWS DIGEST

Republic Arletten Corp. purchased

This Water Jane 191 his evoked a might can be seted on widon at

End W. Hill, former nucleuser of

A special great of \$3 million had

McDocardi XF-55A Voodoe cruzhti

L ravigation systems Need for Single and Twin-Ithe A.R.C. See 114) Acastro Corp. and Thornte Copy of The enter is despeed to have nearly by preventing to voter transmission, LP retige recording

ton, Cons. A new fron has been on The A & C Type 17 The system introduces two copy which exceptants it institutes in tigrable VIIII removes and a finecollecting equipment. Therease is the time providing up to 15 chantel

Representatives of 15 patroipal civil

nuttee constitutions decreed cut

nol Tope F-ti Seriartificated by the CAA, for highest standards of dadge



Most Every Operational

The materia inheritation free may

success View recover and a fine-





SIKORSKY AIRCRAFT



Over the portain of the U. S. Fost Office building in New York is this inscription: "Neither snow nor yeln nor heat nor gloom of might store these couriers from the swift completion of their accounted rounds". We can parachrame that and may that meither for more some more ownersest more places of might new atoms Sixonaky

on the pigmeering mail route operated by Los Angeles Airways, The C.A.A. has eartificated Los secoles sirrors, using Sikoraky helicopters, for flying under instrument conditions. For more than a year preceding the C.A.A. action, moores of test

ord of two and one-half years of eafe, dependable operation of these Sikorsky belicopters by Los Angeles Airents. Testropost flight operation is another significant milestons in

The C.A.I. certificate extends only to Sikorsky 5-51 beligopters uend on the Los ancelas air sail route, but it is safe to oven flight certificates will be extended to other areas.

### WHO'S WHERE

In the Front Office

Honors and Elections



145 AWARD WINNER-Coart Good

Changes

### INDUSTRY OBSERVER ►Eleves Album \$35.6-17 trabujets incorporating new faci labelession

here pened 50hs, Air Matriel Command Tests. The totalle was AFB. Oklahoma City, is hardfire enrice modification for F-64Es row in service, while Allinon is correcting engines now on the production lines. wincing rouge that the girobne, recorded as the USAF's best record ► Witth for fewer multiple installations of jet engages as single natelles.

Finn American Asserts prints are asported conducting on ALPA stake

Zone, on united from molests further smith. Then ribuses and electronal core, on traval from pours terrier from 18cs panel for currents crew for over PAA's perfficular sonte to Manus, mich say, tallor work near from the PanAge crows. Pilots four that PAA about more such through flight armagements, and also contend that previous warkness Clear L. Martin Co. or consulction would toraid tents at Mounthmette

NACA studies of the explosive points recently reported caused by art

Field engineers, that the naises were consed by somelwises inflowers the alance, extension by perfects after deven-in correct, rather than the American F-55 Sehter Afterbassocsermon planes developed from the

FD: Haviland propeller enginees alone their new eight-blade dual

relation remoder, built for use with the coupled Proton testoppop Latest ringuel, in the highly competitive sensible for hope and necury

### AVIATION WEEK HDY 24 1990

Airpower Expansion Statistics		
nodest Thusses's energency request for total new U. S. military lands server Water intimate of Air Force share	\$ 35	bilios bilios
er Procurement summer Waxe element of new procurement illuturent from Air Force share continu allowed named warm for Columns for 1551 Air Force procurement		bilion bilion

### Total estimated to be suppossinted for 1951 Air Force rencomment .... Industry To Double Plane Output

Truman message to Congress virtually assures 70-group Air Force strength. U.S. subten alone production is on the extension recover, for the prition and other con case to this new conrather mobiling restly to fill the people ent madequate of group An Four as repully in penaltic to the 75-group 510 billion soled for the U.S. some

industrial crobalization observer and in

New you to get \$733 milion for plane procurement in 1951 under terms than the total found for additional Name

### Production Contract

but a sheer of peak military output darms World War II Some May, 1940. Recoverelt calls for 50,000 warplanes . . . 450 Mer., 1944. Peak wartime plane output ....... 9113  lot week equipment that the U.S. talage and tooking. How long this would take was strictly a grace. It depends on such

· Ability of complete to remark common wenty at the steemed on rate

July, 1950. Korean Crisis . . . 215 Action Starts on Plane Production New complex problems face industry to manufacturers

A man expension of U S nabbay The difference is well replaced to Even in advance of the Transac stated to move, spaked by Ast Fanor thinkness at the root was 15 account as From Tomes As Hard-Stablese a 1950

plane is about four times as difficult as

 Aldiev to double the supply of partypressure to increase output of modern military craft . Alaffety to not and train the additional weethly production as all July 1950 called 100 of str key employer took



served ats Considered of Astronomics and service and East Materia soutes, and Se. majo, A later model, the MK S, has four KINGTON WITH NA 34 1950

stradly, undy to sitem as soon to needed First per ground support coher . \* Allows rivision of General Matters The tools stored are general purpose \* Consultation Value Aircret Core suspended analogs with total on the guarditics to meet usodaction needs . Contracts were award by Ast Force

entities mediated in World War II.)

PUSAF Indental Mubilipation-Plan

Gauted anapper U.S. our reader. under government coated. Of these condition or are to citalize resolution



J-67 INTAKE FLAPS CUT DRAG A staboud from 147 below: melificon whose arts on our long well, they reduced

Final Season-Process of Cultime Origin District and middle failt. Among each is a pict's consenses. AVIATION WERE, AN 26, 1920

Procurement Responsibility Assigned Under the norther environ of successment developed by the Massistons Board, percursased removalishty for according







Provides Meanfacturing Theats

Memberson Location of First

Align for CNC Intempts, I Contractd Dropp Milk Turbo Liners CAA division chief

discusses problems of transports of future. will sandy downer, George W. Halde-He emphasized the CAYs fedings AVA and AIA are not accessing. The doubt much of our report is hirldy that mint clear he writted his same Reputerments for Commercial Turbine-

"Civil Air Resolutions for Testanefoldow. Haldenger grad, because a uprefeters at supless," he said.

loss sust wit for certification and To avernore hands, Halleman

. Buid tooks camble of systematics as which contended simile he construto normy. The freelights of a firmer approach to they solution ext be undernotice and ordered whele other much a limber and westflate turks

First Pecton-Apother problem to

four trafene carrier have been certifi-\* High Flight-No also considered the ongos problem encountered as high

. Gas consideration to restricting let. that the minimum leading speed in word toward models of the two ver-

should be that used to ILS headener

Airworthings of securit compass to a

. Sepoly all percentes with empty Moselo, the A. V. Roe Joffmor, and cause and instruct them in the use of above 25,000 feet. "The possibility." and that followed, C. L. "Kells" John

tume altitude; in vice of the latter . Make aircrit structures sufficiently soluble on that additional considerate The Civil Accounties Administra \* Smooth and Smith-The CAA scout

pointed out such planes might careed Boeing Testing New four-jet transport design models perpared for windstannel trials

Similar to Student-The femood 135 A 23 caginet, each developing

50 posamojer design with a 1000 no

are within a few replies of the Storto

Agency Has Option crossing speed of serviced 500 pages at codecod, Boeing renormalistives at-On Flight System

# 135,000 lb. is also now that argumily - the same alterate it is estimated that Air Force Position Is Defended Saville upholds stress on repelling atom attack; sees

Karra air ammort adomate: Kindelberger backs ieta \* Ar Swort Mounto-Adol vis

pushle to either sherburn such as bucks have adoquete as: septoet to Korea." World Wir II please were put in . Missiles Cooling Un-Kindoberger Both CAA and cowarry subsettle

Conveyageal Avurion Folias Base!

tol. is putified on 20 of TCA's

### Bumper' Missile In Public Showing

The two state under "Samuel" and Barryon's basic companent—the first

V? and WAC Corneal medifications "This, of spane, waspen that we In February, 1949, a 210 mile alto

First Defense-I H "Dutch" Kintol

American Ariston, Inc., spoke on for

### EQUIPMENT

### Purging Lessens Explosion Hazard Air Force is planning installations on all military craft of system foreign fuel fumes out of planes.

fire 8-56. It suffered considerable data- conduct to the fact truly seen and con-

Desert of englaces from tones are when hel fames were avoided in The problem of fact parcer has a 515-railling contents. Installations on C-54, C-47, and all other planes used Forme accepage from continuers of ler AMC heat surround to espages

AMC for racial use about opening tanks with CCs, cylinders tupped and unted to the feel test west reduce The roters under development for

may specimen before connecting engage on



### KIM WONDER WAGON KIM sedte dag "Works Wood" with spherosted strongs on time, post-loans, feel and copper were and too. The tester

The markete seasibles setton of an open policy produced to policy missed and a one year point by 17 KLM belowment. stems or, what amounting, while second as dilution value, blower aspeates, therein, would no their specy time

### · One-pace Altitated construction NEW AVIATION PRODUCTS • If the as prohibity factor Resets of types of volunto



### VHF Equipment

Collect Type PATR 42, they amenable

New Nutplate

Cowling Latch A susper togglotype cowing latch

one with enemy continue, at us and to



# Suspension Mounting

### Lighting Control

### PRODUCTION

### USAF Awards

Dermonster July 15th Sci 7th States - Remon France Co., 15th St. 5th Co., 20th Co., 20

The following concludes Assurated

Washed France Deep Decision pro-intended Chemica Deep Decision pro-intended Chemica Deep 1990 1992 1997 See Blanks Deep 1997

and road byte article and date AGE 185-88277 acetable electric distriction was E. S. Smapt fore div. Avertice Military and Military Day, Belleville 74 Aim 19-5 DECEST

To Ballow by Decests alminos con-lega and sales, Zaley 1900 DECEST Mi-plane random Ant 1995 E2711, extract, cathing July 1919 2019 printing seek labor July, 1912 291 light printing easing and taken July, 1912 291 light printing ensings and taken July 1910 1910 In 1910 not upon they will 104 415

1) a maker (n. Michardia, Ind., order passe for 0.45 already June, 116 15501

2) 3 the factor (n. Michardia, June, 116 15501

2) 4 the factor (n. Michardia, June)

1, the factor (n. Michardia, Michardia, metals, ingle research, May 1151, 11510

Extractly of Oslobana, National Seconds proceedings on the Propulsion Code, Apr.

germanni services, July 1910 54001
Westinghouse Heriote Corp. District.
Immer On. 1271 ST FM.
Westingheute Hittate Corp. Stockfest,
V. J. photographic from http://dx.

West authors Storpic Sapoly St. Day a, ring consessor James 1800 (2003) one

Without My do, Pandrus inter-

Watson Labs

Alteres bedressed Let New York street to the control of the contro

Confermation and Confermation of the Confermat

Cambridge Labs Applied Physics Corp. Pareston.

1914 BH2

Christic of Young, Annie, month, society on description of eventually and eventually on the control of the 1914 of the control of the 1914 o Versal Products for Trench We-south systems July 1875 the processes \$172.65, \$12.15

to, 1958 8)755 Currently Smalltedy of Technology Pillip and appearanced challen of phone burnet. principal page 100 by the principal page 100 by the page 100 b Situate H E. New York remarch tree. New 1908 \$6000 remarch trees. May into \$12.515

Majokou May Co. Welliam Mess. and, Televisia Frederic Ca. Chicago 2003-Waterally of Earner, Derry, realising the of services in adjustment with playful proposition of the proof appendix. May 1973, See 199

AF Invitations to Bid

ton Styl., Lot Augdes, 67 Shred St N Y 4

PRODUCTION BRIFFING

P Region Applies Co., Wiches, is sethar up a B-47 Stratuet state and me

> Figure luxument dropps of Mone Choose will be held on a three, five Freighted Engine (Swinge at new party

► Hiller Heltosphers, Palo Alto, Colif.



Stead recording the Citics (Little) | Production for of 2021s meres along at of the 16th (LIVENTICEN WITE CITIC Designation, Citics, most severe for Citics (Liventice County) | Treefor were Citics (Liventice County) | Citics ( Production line of 2024s moves along at . of sts 40 to LAVIATION WITH Into 17: Clean L. Morton Co. plant. Tradius wass. Cartification of these bases 2 is in well be at

MARTIN 2024 LINE IN ACTION

### AERONAUTICAL ENGINEERING



LIGHT WEIGHT

Car coppe MIRROR SMOOTHNESS Companies one second highly marked and ten more MIRROR SMOOTHNESS ber accords within 50-100,000 in Hall

# Along P&W's Jet Production Line

Each many receipt poor than 12,000 analysts a tools.



BUFFING fligh relocity sistem in





are also receive manuth fireth. Each blade. Tork welding it four on combustion often- attended, absonous, materials angles. recovers high politic with head beld bedles. Her later with no disages of position absorpt. When sind through brech for welking. AVEKTION WEEK, July 24, 1958

## Why Sodium Cooled Valves?

The trend of modern engines is to operate at higher speed and more economical fuel-sig notic. In considering factors which influence exhaust valve life, togeterware is the domimust one. High temperatures sharply reduce the resistance to corresion, distortion, and freigne life of the frees alloy steel. The effec-

temperatures is shown by the curves below. which are typical of recorded test data. The curve "Effect of Fuel-Air Ratio" shows that so the mixture is lessed out to obtain maximum economy, valve temperatures rise. The curve showing "Effect of Engine Spend" indicates that temperature rises quite rapidly







Estan europeer will unleague an apportunity to disease the application of Euton codions cooled

VALVE DIVISION . 9771 FRENCH ROAD . DETROIT 13, MICHIGAN



OUTSIGN WERE July 20, 7550 AND THE STATE OF 24, 11

# when it's cold outside

More and more, streamly designers are adjuting on Nysira Arin vasion tensors's and experience to perfect the companions of tensorse's alcords, Perhaps these Nastes-Are qualities will help yet asher some of the complex workform of our resource waters. What he design,

SHEETELATERS HER EPIE AC Facilities and James of Stage Adjustable lead their switches Other smalth problem for 24 and 20



Startent, Colylens 200 Fyth Assens New York, N. Y.

This linear actuator that performs efficiently in temperatures of over 100 degrees below zero is one of the many new products recently perfected by Elydra-Aire. Approaching the other extremes are products trated for temperatures of 700 degrees alone zero. Two good resources by you should acquaint youself.



Top datab show Madic's flop extended Silknet's events soil's long afteriors

New Water Flaps For P5M-1 Marlin Size manuscribity on weter and matrix to the caleby while tenion

middly to the gently with things in equated to be fived obstantially on the Model obstantial on the Model of 1964 of the Model of 1964 of the Model of the Model

because appoints defined, total of the Total or Total controlled and profession and the total or total





AIR ASSOCIATES

DALLAS, TEXAS - CHICAGO, ILLINOIS - GLENDALE, CALLE, EXPORT BEFATTERIOR - CALLE ADDRESS - ARESC TITERIORD - Serving the Actions of Aviation

And rechosing the costs to a floating bury will be simplified. With the new awaren west, Jul 24, 1999.

# AIRCRAFT



ery made to better NAS Sangifications

Threads one fully fewerd by milling after hear CLOSE TOLERANCE HIGH-STRENGTN SNEAR BOLTS



### Letliner Tests A. V. Roe Gassio Ltd 's Lettury or

hes clumbed to 10,500 ft -9500 ft One Reds of more than 1100 under \* Que Engine Flight-The plane has

AND USE that share development of

Fifther the letters into the corner.



Increased the forces RENIOC to binding angulate Appropriate Intest NAS Specifications Profive self loding -- "west shake loose" Temperature range to + \$50° F. No special tests constead once standard 12 peut suchet or has wreather Designed for our to rement manager

# Saud for samples and laformation,

ONE-PIECE SELF-LOCKING NUTS The one-piece FLERACC's buffi a stop and a look mit, doe fire on passes, that our region tiples in our re-fire one. Officially approved by many U.S. days.





in all bonds of weather . . . Moreovery Assertic Winners are consillusing a safety factor to military and civilian places

experience is your assumpts of leadership in

namette

POLICE PLANS TOTAL PINELS

# DEET the AIRSINER with a FUTURE!

pressurized, high-speed AIRLINER

# Chosen by EASTERN and TWA to modernize their Twin-Engine Fleets

For OPERATING ECONOMY! High reviews Ch. nacity, bigh craising speed and low maintenance costs add up to missimen economy for Marian 4-0-4's. Fast ground loading features will out stopper time. And remember, the 4-0-4's basic configuration, originally designed for low-cost maintenance, has been further improved as a resalt of almost three years of Maron 2-0-2 experience with Northwest Airlines and leading South American lines.

For PASSINGER APPEAL! Shorter tribs, shorter stone, and pressurined, sir-conducered, comformula court cabans will give travellers more seasons to the her defend. And the Martin defend Arriver can serve smaller airmorts to help co-

result from the 4-th-Cs efficient wine and fun design. Built-in accodynamic stability will nonmet wide range of passenger and cargo loading. For FUTURE USEFULNESS! Present structures payload and power plant changes to meet future sirline requirements. Turbo-prop carnes will

For complete specifications, write today on THE GLENN L. MARTIN COMPANY, Buls-

for DEPENDABILITY! Excellent low-speed fiving qualities as well as higher cruiting speeds will

describence work is so scheduled that the end blogati refusions we completely coordinated system. That is Martin Systems Engineering That is why the Martin coguarding staff is designing surcess and satisfies as integrated all the state of t

That is why radar, serve mechanism, automatic courrel, accommic computer and anisans expects . . . as well as acrodynamicism, structural engineers and electrical, hydraulic.

Designed from nase to tail by modern

Whether the Martin product is a commercial minimum like the 4-0-4, a calling

bomber or a garded missile . . . Marue's employeeing staff works on all phases

of the country property . . . and the same power property facilities. And oppositional controls and military arranged or passenger facilities. And

Martin Systems Engineering . . .

armanent and power plant (amiliation specialism . . . are all part of the well-integrated engineering team The Glean L. Marries Company offers its customers ander.

# FLOAT SWITCHES... Standardization For



# REPUBLIC'S LATEST JET FIGHTER

Republic's XP31 Interceptor unknes 20 Accourt Flour Swimber to source dependable reflication and counted of

The XP91 is one of the moon Novy and Air Force

disphragin or believe presure switches. Astrone's syste-

ance on any seasons are craft control problem tog may have. Preject & Sales Engageers THE THERMIX CORPORATION

THE AEROTEC CORPORATION

CONNECTIONS

GETTNWICH

# be dimensional by a stack standard

The purpose to referr the end and gages and tooking for the enter nonce

### Bumps Recorded In Rough Air Tests

"Rever" here taken on added own In the pergons, on AF lightplant

New Testing Devices. For Aviation Cadata

vides a retriber taxable Austres Medicae Bundelph A770

too cudets. This provides digta for an New Stud Standards

dustry siccost entire and astrophenes

Stock sections will be simplified for and imperior time. Shorteen, made



FOR EASY ASSEMBLY OF MARMAN UNIVERSAL (QUICK-DETACHING) CLAMPS SAVE TIME AND COST IN ALL SUCH APPLI-CATIONS. PHOTO SHOWS DUCT PRIOR TO CONNECTION OF MALE END. FABRUC COVERING PROVIDES SEAL WHEN CLAMP IS TIGHTHUM





### AVIONICS



### NESdevionel device. Hardy delti solare student stat and C extra in the director to profess both 20 extra handle and deal presion above face to operate alleges (A) and on two A c Select transmitters. Brish voltages deflect position Stick-Force Indicator Simplifies Testing

Suring deflections control voltages that operate d.c. voltage and make possible a complete Selven type indicator. Varying voltage no trouble.

redster augusti-uso menerament af a umple con, or bandle Sidewise move ►Usual Proceduse—The two corners Adventures of this new stitleform Attacking stoom puges to some part of the entern used to treasure the Unaffected by orderery factorium

rat a permanent record to be made controls and they actual deflection to Stern gages are still used and exclut, string company and at different at are veriations, and as emphisis in onas to prevent unfo handling during une New Setop-in content, the intrament developed by the Burrau opertref in a table catendrar vertically in ates spiritectorily as version assessing

a centilever spring whose diffection is sudicates of the dio Sciena type androal headle, that effectively localpilot at escentally out point.
Floure of the red is then a measure the handle and spheacel yout. it defects one or both of two flat

closetus (E). Discorphial saw (salid) arenta confirm social









Inefer and proportioning types-







driggs products to muct your specialized populationers of to menuficous so your own specifications.





# here it is THE NEW ADEL

# 3000 PSI NON-INTERFLOW 4-WAY SELECTOR VALVES\*

The first a summer up some uses

3000 PE; 4 PROLIDENT PRODUCT COOP

New-Interflees - most team settle recovers Attended Salester Malor . Horsen was ton twen

changing shaft positions. No moving trackings under tratem bustage



at make amples, so that one stop is do cutted to two commercial de. Sebra a removing to the four spalled to the end defection, a force subcotter

discal cavity within the bundle just When the handle is depleced, the

traveretter and industry unto The ► Cobbeston - The astrongert is estbuted by hazing weights from the operating the bresh shaft, the californ-



## BROTHER, IT'S AS COLD IN HERE . . . as it is 7 miles straight up!



It's 70"P below zero isside this "Cold Boa", get the Posco per up which every condition under which the letter let please



BORG-WARNER CORPORATION 14700 HOSTH MILES BOAD



In this couldry pagine other-id its queently you would has the grawer. In 18 years' experience, Auto-Lite research and exhausted behaviour skills have difficult wire and cobia replace. Today, the combined with the new increased feedly tee at the Auto-Lite Part Murcu plant. makes it possible to accept additional

cannot buy better wire and cable.



Abrech High Renice Sphiles Shife have Shife State State and Shife Specification and Sales also be consecuted standards

### SALES & SERVICE



### Tyler Grows With Spray Boom

Big East Coast operator has large fleet busy all over the U. S. and is making plans to expand to Australia.

Wicza, Stravasm and NSNs, ST-13s, Reage, 80

But, the west is highly resource two Procest Fowgeent-Fives over most new crossets of there NAS

### RRIFFING FOR DEALERS AND DISTRIBUTORS

Finds Files Andahlo-Arnest ex Reson Office O'Hate Note Post

### LETTERS

### He's Disillusioned You state in Amorton Wast See 12.

To sense a little listory about 1425. yland a splene—which was a new three yland a splene—for fall sund people—it strausful from no 50 or 110 ha (COCA) The best tree for the lightplace market

These are exceptions, of S W Lewise. 1201 Fell Rent

ALPA's Short Hauler "Prior" Mrs of Shore-Book Plane" cought my ere while critical up to Arrange ALPA's specifications remarked me of

factor of auplane drops and therefore should not have to "ploy a large part to ALFA's proposals." They state brooks "no cockpit and thermal notificing at like a plan

to your their sations off on the public lift are not contains if made but the Cab. Is these any scores why a clean employed Images the sate reductor trong to all Model T Finix They know better. They remm a PARK They thou could. They medicated, built as come performance, brought the peec to a lovel start could be plinated by more. They will aske and don't

I control dus't intend to aboute our Axtress | Dagon. Weedleven, L. I., N. t.

ROAC's Record We solded on page 57 of the lens 5

Turbo Cyclone

Another Australian I want to let you know that . . . I see

> J. Doros Chief Manteneses Engineer AVAITON WEEK July 24, 7050

Performance points to STEEL PRODUCTS engineering

### from small precision eggrs... te lorge intricato propeller hubs

testing and performance combine to provide the ultrasite in contract manufacturing Steel Products has the reportance, skilled personnel and know-how to

meet the practical needs of agreeaft and other processor transitionairers. Why not let this Steel Products combination help solve your problem? Send your inquiry or your blue wints for opotations.





A MACHINE IN HIS PLANT

# had a Chest X-Ray!

he checks every piece of mechanical confument be owns for your, labelestics, efficiency, Yet he fails to take the simple precaution of a Chest X-Rey to make sure

Between the area of 15 and 54, tuberculode leads all other diseases as

cases than discovered are followed up, we can abgrigate TB approv as a

Will you do your part today? Get a Chest X-Bay, It may mean your life!

Published in the public interest by:

# McGRAW-HILL PUBLICATIONS

# orter Mow...while copies are available!





Indispensable information for those who fly or service the fiving public.

Yes, please send me \_\_\_\_\_copies of the Aviation Week

of Air Associates, \$315 West Gled St. Chicago 36. Henry Sulfrant Average Almort Calumbus Chay

Miles - was the second of the Day Jess Season









Dates style and comfort



# Craising speed, 170 mph. There's more in the Europe story! Let your

BESCHOPATTE AND THE AIR PLANT OF AMERICAN BURNISH

TONANZA

AVATOR WERE AN 25, 1992

# AIR TRANSPORT

### Trans-Atlantic Test: PAA vs. TWA Opinion written before President approved PAA-AOA mercer reflects earlier CAR thinking on connectition

TWA faced the biercst shallenes in

PPAA Colonia Serve-Cen TWA alone compete effectably with a

Per America's mote militar in Addition of AOA would receive this of tent US international or traffic from 53 to second 72 percent With consistion of ADA. Per Assertion Mescook Threat-Tip, O'Court and Adams showed, past PAA a

WINNER AND STILL CHAMP

There alignings included charges brodly or counter to milde policy by

and after its appointing of American members and that nesteral of learning elitative Asserters fing competitions across the Adaptive They counted out

> cledge that its electrics of ADA del stracture one sound and it forest Although CMS member Harald

### How Merger Deal Affects Companies' Finances

than \$10.6 railties. In addition, of

terminations, long-held in abovate, mallon 5 percent detention river

 Kores medest rary well change · Mail pay questions for the two activement of additional debentures.

rollion in this moore. American

however, in this execut, will refer a law the NOA stock Asserting Evenet As of Dec. U. 1949 Assessmen

melton. The addressed could of

horsened and the 510 bellies ber-

suffice on the ADA Seprement Of course, AGA shalf, as a per-

ANATON WING MA 26, 1912



riaded facts do not women exhabiter come watt have evisted before the Fixes, Lee Discont-Soft CAS Vice Fixe Stiffing Especial-TWA will not

radually. The earner exceed serve it-

err, he did to for different nemons. He was for lines has been emparer than make a relatively source charge in PAS's are and poston in the sittent

> Honolulu Lights The Country band that second a

GREATER CRUISING RANGE and SPEED sell more PLANES!

Standard Aircraft

Equipment Co., Inc. MINEQUAL N. Y.

Chatra Cire 7,0033 CAA Approved

call

STANDARD

for these

leading lines

BENDIX PRODUC

ECLIPSE-PLONEES

EXIDE

GOODYFAR

KOLISMAN

PACKARD

II. S. GAUGE





16 High Emperiors 2002 to 18000 No. 10 10 Char reli Arti Octobral VFO Operation Media COA T Cryptal County assignator has serve modify entitlely Cryclel Cultinoper Bods arehad \_\_\_ All mighted Execution de-

See models are emphasis -- ChA 7 Security Crit & M Openities) and CBA 7 Medifusion A CRIT

Plans Pushed for Japanese Home Line

Plans for paymenter and company a downto become askine under the Demote ligares siding severe Gen. Meetather and participation or the new Japanese aposition would be

### Korea Airlift Ten percent of airlines'

4-entine equipment is already mobilized. U.S. whetelet and nonstrainful-

Pilets Sended-Pro Assessm, which

ANIATION WEIK, July 24, 1880









### ENGINEERS these are Your Catalogs

a 16 segs malog ferribase

additional information with the expenses and feeding





INNWOOD II A COUNTY) CAUT Seed was a copy of Admitter Conden 6511 [7] Francest Cottob of 655 [7]





### TOOLS Combine Strength, Slimness and Utility to achieve areater Aviotion Accuracy Aviation maintenance goes the Smit to remore eriginal performance

She the Reacher (illements above) are page sensor for fax allhence before; and for choose field make framos took orders and out perform all sandar socia. Assisting through any of the \$50



Costed Notices action is Keen "It

### Center-Line Test CAA seriely, installation

approach light system. ne super-priekt, coadcase: (inchites finden may be total by the Coul CAR's research both patronity fighting P.Cost Problem-ALPA opposes both

respective extens. But if you staff cost of notalling a prater had system

Light flick greented by the Store

ANATION WEEK July 26, 1930

The split-second beauty of light from

the condenses dephase below along showlest 1647 slove line has fature

The Westinghouse first care, car been of 3.3 billion condicators at I

### CAB Finding Favors Hughes in TWA Case

her control of TWA carle to 1997 non ►510 Million in Notes-Harber Tool

ANALYSIS WEEK July 24, 1958

Die beide get liebt begreichte seben. Die besteht der eine beide bei dem amily determined at a places, AERO INSTRUMENT CORP. State Makes

Stodals to recommend to the Board setime recursiv sungs to assure sociador Anchor Nut cutibl structure. The Board has been Mexico Turns Down

EAL Route Permit 1 50 ... (1) 50 2 hear briefers wh

New Orleans on Masses Cas LOG ACTUAL

# FLYING TIME





3 Tris benefer You handler of last firm and flush with money, Yell purchase for last firm and flush with money and flush for benefit for the benefit of the last for the last flush flush for the last flush flush

4 BANKS A

Wate for Golden

" DILL MANUEL



quinement may be, String's Air-Let us solve at Whether your Bestol receip the challenge of year service 26 Branch Offices

Na matter what your special re-

41 Years...1489-1950

BM PERCISON INSTRUMENTS FRIST Letest Bulletin of Ages Controls

rights on eacht couter for every one ske Terminal Facilities For Nonskeds

The new singlestory structure inriades - Picht constitute office, a nec-

named bright working and

ANIATION WEEK, July 24, 1930

# Airline Navigators

Seek ICAO Votce

nical problems of the profession and

Islas D. Nielscht, of TWA also an

### Nonsked Agencies Set Business Code

### SHORTLINES use May your 27 negoted over the same



4110 -Sure set sken to AN 4140 - Seasts Box and Soupes ANAD - French and Don to AN

UNITED STATES STEEL ACTION OF THE PARTY OF



Mary hodey for exemplety information SHELL OIL COMPANY

53 W. 200 Dt. Hew York SQ. M. T. 160 Buels St., Sea Avenagere S, Calli.

FOrmer National Aircrack-Hot etc. crited a turnocury memorica from

\*Associated Artefins Undervoken-

Brook-Purchet Transachus mustal. ▶Penama-Har net netn for DCA and the Bushedond of Bullets and Park American Traffic between South Steamskip Clerks, which represents and Alaska during first half 1950 set on about 2200 of the sixtuar's record new off-time stoped

\*Causel-Record \$234,665 not profit in May agreet \$773,656 in the same month last year. ... have more multitateline 1,001473 tra mice set a sen company record. Chap appropriate as fare-

\*Calculat-June passenger between to

Continental-Resent Square give the

► National During the fixed year ended June triffic was so \$5.6 percent over

CAB SCHEDULE

witches all recycles mornel man. (Dorbet

(If at al) Fety 15—Shoring on Energy Lucettys-

And ph-Spounditon of bounds on to

Any 16-European of bearing on as-west of West Count African Study on-forces and combine compension at option White Air Libers probate to the even bearing with an air

Fife year and CAS investigation of the partiest consessy and elicinosy (Estimated as all

of AUN)

r Min-Deal represent on CAN a so-real active system Makes Air Trans-(Thousan active

Highlight who tree group I have be refreshed defining franchist Franchistops and it is Andrew Con of printing the first Personal Publishment of such in The state of the last and the state of the s

At other sea to be sent of refusive as ENGINEERING TEST PHOT

HEED & PERSON HEFE & 1281 proper and the last the streets in the set of PLATE INPLOTMENT ASSNCY

Ers SELAWY, Wilgress Now Johns CART (The St. ) and our in other world pro

and the company of the first representation for region regularity and the same of the property before the property before the property and the property of the same of the sam

so below the beauty of because CONTROL OF STATE ALBRIGHT & COMPANY torics 5, Justinerille, Plottle

LOCKHEED LODESTAR P & See All Land Address of the Person line P 8, San Sile Plant 2 (12 8 Street

FOR SALE

N For Barrier, Parent Proper so-

UNUSED ARREST FORWAFAT TEAM DANG OUTLAT CO. FOR SALE Our 308000 Granman angleton net of agent parts for T. 6 100 Clear El O let engage, mangle-pared to Gas

Welden, Man FOR SALE

AMPS GENERATORS Edinto P.N. 1549 S CAA Gentinated - Further Condition FRANK ASSESSMENT THE PARTY OF

SCHOOLS

Rising Sun Accounted ELEANEZE OFFORTUNITY believed headerprint court or arrivation. Large

DAVE BUMBE CO.

THIS PAN REICHCRAFT NC 57152

@ Complete Line of New and Used-

AIR FRANCE Trench National Airline, 563 Fifth Ave., N. Y. CATALINA - PRY-SA Private control of the private seems points of the private seems points of the private seems and the private seems points of the private seems and the private seems points of the private seems and the private seems points of the private seems and the private seems points of the private seems and the private CAR CENTRICATED ... BEADY TOR OFFINATIONS One with 1411 MK 1202 steam convenien 200 50 FIRST care time 50, 105 EN

CONSOLIDATED VILITE AIRCRAFT CORPORATION FOR TALE PBY-5A Catalina AMPROPRIOUS SEVENS BOAT -- 190 get ger capetity.-- the ex a priority to continue arther to get expedient in the world--

111 600 Pty Augy OH! FOR SALE THIRLEHOMF C.18.9 REFERENCE

7 PASSENCER EXECUTIVE PLANE Con in Justice of Contract Name and Advance of Contract of Contrac

AIRCRAFT & FLECTRONIC FOURMENT As a leading repolier we offer a BRAND NEW INSTRUMENTS DUST & REVENIENT SETTINGS William. CHARLES AND RECORD

SEARCHLIGHT SECTION

Wate for emplote living of A Supert Green Jief WUX Great Nack, N. Y. INSTRUMENT ASSOCIATES 27 E. Beyview Ann., Greet Mech, N. T. Teler 194 posted 7-11-67

REWARD A TOTAL OF 10% OF APPRAISED SALVAGE YALUE

for recovery of 10th Contra, 255 AUSTIN Stated TOR. Cod area from his 10th hot peer Processing to the Park of the Control of the Contro MANGEN & BOWLAND INC

Place Main 1161 Trains, West. 8-75 & 8-75 SPARES DESTRIC & BASSWOOD PRINT

The manufact law 40 to 400 law are as a second of the control of t FUEL-DIL-HTD. STSTEMS Sector Sale I Wash. PRINTED WHEEL BUY NO 1959

### STRICTLY PERSONAL

SPECIAL DEPATCH FROM THE HAVELAND, Streets Properly and later and

Hen of Tirown Against Manager Sob Schools see probable the most spectacular pushess

Schoolf's high referrly deltax got some succeptival consisten but full when Sob was

THIS PLANE IS SIMPLY DIVAN-We have below as a "technical decoration" of a new Solien transport, the Acr. Mostle 5 333, writes and submitted to us by an Italian

The MB 130 is a low-wing 2 motor monoplane with 3 wheel estactable undermessage, for 6 people, andwing the pilot, equipped with Contaconal E.165 The pilet's cells has double command, but the stacing wheel at the right is such dissentable . . Contractor a worker. . The way fugs on the

The feedings, shell structure, is sub-deuted tota from sections a front contaille the hoology and the majors is equipped with correction firm. . . . The bond Unlisting of the place. The 2 pastegor dram on find with four help,

PROG CALLERS FROM OSEROSS-Our real commercial. But Maiden, of

WHAT'S NEW

What Others Say FORTUNE MACAZINE (Be)

trace the development of Sikk Airin energy. Feeting this way the war nebbe's standomet, and down a bend

The enaparire bases sto case within Irras Public Utilities Commission

by the CAB serve to undersome the are under some obligation to corey madcontrol on solling to per. . Actually,

ANATION WEEK, July 54, 1950

### ADVERTISERS IN THIS ISSUE

AVIATION WHEE-HULY 24, 1950

Perco Products Company Acres - Faller & South & Rico Inc.

Feed Annual Corp. Agency-Eren, Wom & Co. Inc.

Fords Statem Dr. of State August Core. Dod Core

Sull Oi Conney Anno-L. Waller Thousan Co.

Spay Quanty Cooper Access Chicks Diffe Seat Co. Lor

Selected by American Co. 25 Procession at Supply American Selected Co. 25 Procession Co. 25 Procession and Selected Co. 25 P

Led Morehouse Co. Agency -W. S. Mrt. Co. Marquette Match Products Co., The ....... 2

LORD

MULTIPLANI

All-Directio

Better Than Ever

o increase

Land Maltiplace Movemany has now

The rabber faming element is pro-

The site costs LOLD policy—se pro-Vibraino control surveyor ecourage reduces management . . . builds

LORO MANUFACTURING CO., IEIE, PA.

... Rander Rubber F

### EDITORIAL

## Can We Help You? Do you think Avernor Wans could help you more

the weekly homes not instance designate stooms at the contract of the contract

sig ma a big more on the nevera poolant they are neglying for the market and we as them of they for endying for the market and maybe it develops that they have failed so sell suproce outside the planty set. We've land south, too, that we do'ff point a regular at fail-best an exercic or product not we failed learn size at fail-best an exercic or product not we failed learn size once on the production of the second prior year didn't happen to ore the pericular insect fail. ore the sizes.

Ben set a few tipul you can think of more!

How are the majorites in the def water. So the product of the design of the def water is possible for the product of the design of the design

other set the wheels reaving to change things, or tell

# More Comment on Pullman More letters from article leaders, reprinted below, ten been recovered upon left workly come need to need

oranest on an editorial kere concerning a con sail ad for the Pallrain Co

use racked a soften less loud of anomity as their adventuge C. B. Servi, Paudon Austrian Author, to Non York, N. Y. Thanks for coading me a copy of your advented el-jone of , while had alonly note and such with adtrect.

"These scenes to be a lot of unseed emblores in our indireky, be

of the sixt enhance, but offer that Judes you satisfied branging and through a filter and another with couldness or thought part get Margin, anisotrous such laws that colonial visit being and Margin, consistent such laws to —a I recently did at it is a thin Law August. I stort like at any possible you obser states it. Law August. I stort like at any long to the property of the I S. Dissow, Frankler I S. Dissow, Frankler Margin Cap, Mon. You way desagabiled not to film Committee with the reclosule of the colonial increases. "Pollmark Version Margin Margin to predefeating the colonial increases."

Capital Addison
Walkington, D. C.
It is this hard of writing that does wouth to help or along
a this bosoner.

At a this lased of soming that does much in help as along as this humans.

Acons Connects

Acons President Safet

No Ford, Miniments

column 50° a troy though decisions. When the disposal is also appealed out to entrements. Plytima 14. It is also appealed out to entrements. Plytima 14. It is also appealed to the entrements. Plytima 14. It is also appealed to the entrement of the entrement of the entrements of the

-ROBERT II. WOOD



Precision Is the Keynote—in Production and Performance!

The word proteins perfectly development proteins; supplied classically byte is weight. I recently-law recognition of the proteins of the prote

BENDIX - DATE: SOUTH BEND

PACHESTA COMPANY PORC





# Toote Bros. serves on America's leading aircraft

America's aircraft is today writing history in the skies. Mighty air liners carry impatient travelers to every corner of the globe. Swift bombers reach our far-fing outposts in a matter of hours. Jet-propelled interceptors attain speeds that are military secrets. Heliopters permit rapid ship to shore marine landings and aid in important missions of rescue and liston.

The goes in the mighty engines that power these craft must be miracted of perfection. The actuators and power units must combine rugged strength with lightweight-must perform complex operations often in a confined space envelope. Foote Bros. manufactures gests, actuators, and -for the Air Fores, for the Navy, for commercial air lines. FOOTE BROS. GEAR AND MACHINE CORPORATION DOEL AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. AVE, 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 4. Chicago, 30; Illinois Dept. 40% South Western BM. 40% South Western





